

**CITY OF SHOREVIEW  
MINUTES  
CITY COUNCIL SPECIAL WORKSHOP MEETING  
September 8, 2014**

**CALL TO ORDER**

Mayor Martin called the workshop meeting of the Shoreview City Council to order at 7:00 p.m. on September 8, 2014.

**ROLL CALL**

The following attended the meeting:

City Council: Mayor Martin; Councilmembers Quigley, Wickstrom and Withhart

Councilmember Johnson was absent.

Staff: Terry Schwerm, City Manager  
Rebecca Olson, Assistant to City Manager  
Mark Maloney, Public Works Director  
Tom Wesolowski, City Engineer

Advance Engineering Grant Myer  
and Environmental  
Services, Inc.

**REVIEW OF WATER TREATMENT PLANT PRELIMINARY REPORT**

The City's Capital Improvement Program (CIP) plan includes the construction of a water treatment plant in 2015. Staff anticipates that Shoreview will continue to be a surface water supplier despite recent discussion by the Metropolitan Council to switch a number of cities, including Shoreview, to use of the St. Paul Water Utility for their water supply.

Councilmember Wickstrom noted that approximately 9 or 10 cities have similar projects in the works, and the DNR and Metropolitan Council will take these into account with future water supply decisions.

Councilmember Quigley asked if the main question that would impact this project is what happens up stream. Mr. Maloney responded that the study on the low water level on White Bear Lake somehow became a review of water supply policies. No decisions have been made that would lead Shoreview to change its direction with building a water treatment plant.

Councilmember Wickstrom stated that the Metropolitan Council study looked at three specific scenarios: 1) take 5 or 6 cities off ground water supply to receive water from the St. Paul Water Utility--Shoreview is one of those cities; 2) add yet 3 or 4 more cities to using the St. Paul Water

Utility; and 3) directly pump water into White Bear Lake. All of these options are to help the level of White Bear Lake--the reason for the study. These are not valid solutions to take Shoreview off its own water supply.

Mr. Maloney explained that the reason for a water treatment plant is because for the last 20 years the City's water has had an increase of manganese and iron content in its water. Although the level of iron and manganese does not violate a primary standard that is a health-related concern, the manganese does violate the secondary standard. Further, these two elements are causing aesthetic issues that result in staining of fixtures. The water treatment plant was planned to address these issues. It would be near the Maintenance Center because that is where the water storage reservoir is located. **Mr. Myer** stated that there is no primary standard for manganese. The secondary standard for iron is 0.3 milligrams per liter for iron and 0.05 for manganese. Some wells in Shoreview are close to the secondary standard for iron. The average manganese content in Shoreview is .22, a little over 4 times the secondary standard for manganese. What is most noticed is stains on fixtures, clothing, etc. The water treatment plant would also address levels of hydrogen sulfide (gas) that gets trapped in the system and produces an odor.

### **Presentation by Mr. Grant Myer**

The City has been a public water supplier since 1965 and currently serves 26,000 residents, as well as commercial businesses, schools and neighboring communities--North Oaks, Arden Hills and Vadnais Heights. Daily water demand averages 3.0 million gallons per day (MGD). Water demand on a peak summer day is approaching 8.0 MGD.

The existing system consists of the following:

- Six groundwater wells
- A storage reservoir with capacity for 1 million gallons
- One high service pumping station
- Chemical feed systems
- Two water towers with capacity for 1.5 million gallons
- Over 100 miles of water main
- Over 1,200 fire hydrants

The system serves over 9,000 connections and complies with all primary drinking water standards. A flow chart shows Well Nos. 2, 3, 4, 5, and 7 coming together in the storage reservoir where chemicals of chlorine and fluoride are introduced before the water is pumped out into the system. Blending the water in the storage reservoir and then adding the chemical treatment provides a consistent quality of water in the system. Well No. 6 is in a location where it is treated on its own.

Raw water quality has been changing over time. Secondary standards are not being met, which result in aesthetic concerns of "colored" water that stains infrastructure and clothes. Disinfection residual stability is variable because of temperature and raw water ammonia, a component of ground water. The water treatment plant would address these issues. Also, the aging infrastructure needs to be addressed.

The Preliminary Design Report goals are to:

- Update water demand projections
- Establish water treatment objectives
- Review existing and anticipated regulations
- Evaluate treatment process technologies for primary and secondary drinking standards
- Financial implications for operating a water treatment system into the future

Population growth is projected to be very small, which means relatively little growth in water demand. Dishwashers and clothes washers are becoming more efficient, and the population is becoming more conservation minded. Mr. Myer commended the City's water conservation program, which brought peak usage down from approaching 12 MGD to less than 8 MGD. Shoreview currently has a maximum capacity for 12.2 MGD.

The proposed water treatment facility would provide 4.0 MGD on an average day and 8.0 MGD on a peak day. If demand were to exceed 9.0 MG on a certain day, there is 1 MG in the water storage reservoir and approximately 3 MG in the two water towers, although half of the storage in the water towers is to be saved for fire protection. The existing groundwater wells have the capacity to pump 13.2 MGD out of the ground into the distribution system. Preliminary discussions with Xcel have started to obtain an easement from Xcel for a water pipe to connect Well No. 6 to the treatment plant.

Councilmember Quigley asked whether the City infrastructure is aging to the point of possible water main breaks. Mr. Maloney stated that the water main infrastructure was built in the 1960s and not old enough to be a big issue. There is no concentration of users in any one area that might cause a water main break. During the few breaks that the City has experienced, no one was without water usage while the repairs were being done.

Councilmember Quigley asked if there are ongoing costs once the facility is built, that the facility once operational does not incur additional cost. Mr. Grant stated that the proposed design has very low operating and maintenance costs. The biggest cost is pumping the water to the reservoir. The electrical costs in pumping that is there today will not change.

Councilmember Wickstrom asked if consumer usage could be a combination of treated and untreated water if needed. Mr. Grant answered that up to 2 MG untreated water could be blended with the 8MGD treated water without a noticeable difference.

Mr. Grant continued his presentation. The treatment goals for the facility are: 1) removal of iron and manganese; 2) disinfection by-product control; and 3) finished water stability. A number of technologies were evaluated. The first hurdle for further consideration of any particular technology was whether it would work for Shoreview. Those technologies were then evaluated on the basis of whether they could be constructed on the existing site, taking into account operations and maintenance, integration with existing systems and aesthetics. If these criteria were met, then the financial and life-cycle implications were evaluated.

Technical evaluation of possible treatment facility systems included:

- Pre-oxidation alternatives of either physical aeration or chemical oxidation--oxidizing manganese in its solution form before it reaches air, when it oxidizes and becomes particles that are deposited where they are not wanted.
- Filtration is a system that forces manganese in solution form to become particles that can be filtered out at a controlled location. This may be done through gravity filtration, pressure filtration or filter media selection.
- Backwash Reclamation is a system of backwater to wash particles out of the system and direct them to a different basin. Manganese and iron will eventually settle. The clean top water is reclaimed into the system and the particles in the remaining water are directed to the sewer system.
- Oxidation through chemicals or chlorine.
- Connection of Well No. 6 to the water treatment facility - the biggest advantage of this connection would be to produce consistent water quality throughout the City. The highest content of iron and manganese is in Well No. 6.

In looking at the prospective site, different technology facilities were considered in terms of integration with existing infrastructure, operational considerations, site access and safety, construction issues and future maintenance.

Facilities that met the first two criteria were then evaluated for capital cost and life-cycle. Four facility types were identified:

Alternative 1: Gravity filtration with below grade plate settlers

Alternative 2: Gravity filtration with traditional backwash reclamation

Alternative 3: Pressure Filtration with below grade plate settlers

Alternative 4: Pressure filtration with traditional backwash reclamation

Projected costs range from \$10.5 to \$12.5 million depending on which alternate is selected. Alternative 2 is the preferred option and is the lowest cost at \$10.5 million.

In addition, an aeration process to remove manganese, iron sulfide, efficiently would add a cost of \$425,000 to the \$10.5 million cost of the treatment plant. Hydrogen sulfide will also have to be treated and can be treated in the aeration process rather than with chemicals. The decision is whether or not to use aeration or a system with more chemicals. Mr. Schwerm stated that aeration is cleaner environmentally and safer for employees. Mr. Maloney added that aeration gives the opportunity to react to conditions of raw water quality.

Councilmember Withhart favored the more natural aeration system rather than using chemicals.

Mayor Martin stated that adding the aeration system plus the cost of construction would mean issuing a bond for over 20 years. The cost to residents would be approximately \$2.00 a year. She asked if more employees will be needed. Mr. Maloney stated that there are a number of employees already certified for this work. Staff schedules will be flexible. The treatment plant will be adjacent to the Maintenance Center and not separated geographically so no need for

many separate offices. Mr. Wesolowski added that the system is fairly mechanized. Many functions can be run from computers at desks.

Councilmember Wickstrom asked about treating for pharmaceuticals. She also asked if maintenance on one component would close the plant. Mr. Myer explained that the impact of pharmaceuticals is very small because of the City's deep water well system. Repair or maintenance of one piece of equipment can be done without stopping operations of the facility. Consideration was given to the fact that there is enough space for the facility to expand in the future, if needed.

Mr. Schwerm stated that the next step in the process would be authorization of a consultant agreement for the final design. Bonding and bidding would be over the winter. Construction is scheduled to begin next spring.

It was the consensus of the Council to move forward with Alternative No. 2 and to include an aeration system as part of the design process.

### **REVIEW OF COMMITTEE/COMMISSION HANDBOOK**

The Council reviewed proposed amended policies to the handbook regarding appointment and attendance of committees and commissions.

Councilmember Withhart suggested a section that addresses the fact that anyone on a committee or commission is really an ambassador and representative for the City and how important it is to respect all residents no matter their possible anger over an issue.

Councilmember Quigley stated that it is a balancing act between appointing people who are qualified and interested. Although these are volunteer positions, it is important to appoint people who are loyal in attendance and participation.

Mayor Martin stated that poor attendance may be a morale issue for those who faithfully attend meetings.

Councilmember Withhart stated that attending meetings 80% of the time as required is very difficult in today's world. He would prefer to see a requirement closer to attending at least two-thirds of the meetings. He would hate to lose a good committee/commission member because that person has temporary outside obligations and cannot attend as many meetings as required. However, it is important to contact the staff liaison and/or chair. If there is any problem with attendance, the member should be contacted to find out the reason.

Councilmember Wickstrom stated that she likes to see a high bar of attendance. It is not necessarily a reason to ask a member to leave if the bar is not met, but it is a way to check in to ask if there is a problem.

Councilmember Quigley stated good follow up on issues within the committee/commission, such as attendance, is done by a good Chair, but that is difficult with volunteers. When appointed, he would like to see each member receive written standards about what is expected.

Mr. Schwerm noted that Planning Commission and EDA appointments and interviews are done by the City Council. The Council also chooses the Chair. Anyone interested in being Chair of the Planning Commission or EDA informs the City Council. Previously, there was no re-application process. He suggested that after two terms, the member would have to go through the application process again. He noted that currently committee applications first go to the committees for recommendations. If applicants have to re-apply after a certain number of terms, the committee will probably will not turn down someone who has served.

Councilmember Wickstrom stated that it is important during interviews to be consistent and ask the same questions of all candidates. It is also important to not assume the strengths of someone who has served but let them express their own strengths.

Councilmember Withhart stated that he believes the Council needs to be more involved with appointments rather than rely on committees. He would prefer to receive names of several candidates ranked by the committee rather than one recommendation for appointment. For example, the members serving may be prone to recommend applicants with similar interests so that not all areas of the committee work are represented by the members.

Councilmember Quigley stated that being consistent with questions is difficult because interviewers may know the background of the applicant. The questioning process is getting an impression. Interviewers use different questioning approaches with questions altered to fit the situation or applicant to get the best answer.

Councilmember Wickstrom stated that it is also important to not assume that backgrounds of those applying are known. A question that asks about strengths instead of background would be more helpful. She would like to see a better set of questions that is asked of everyone.

Councilmember Withhart stated that the committee should send their recommendations to the Council naming their top applicants. The Council needs to take a larger role in this process because if the committee only determines who is appointed, it could be that the committee becomes biased. For example, the Park and Recreation Commission may appoint someone who is in agreement with other members about softball issues instead of appointing someone who would better represent a certain sport. The Council needs to make sure that different interests are represented on all committees and commissions.

Councilmember Quigley stated that these appointments are a way to represent as many residents as possible which means some type of gating process. Mr. Schwerm responded that the best gating process is for the City Council to conduct the interviews, so that the Council gets to know the members. In September, members up for re-appointment are asked if they wish to seek a new term so vacancies are known in order to advertise. The only committees and commissions who have been informed about the re-application process after two terms are the EDA and

Planning Commission. If this policy is implemented, it will not be effective for everyone until 2015.

Mayor stated that she would make interviews by the Council optional for committees and commissions other than EDA and Planning Commission.

Councilmember Withhart stated that some of the committees should be task forces. They were formed for certain purposes. Once those things are accomplished, the group needs to sunset. For ongoing committees and commissions, he would like to see staff give an orientation presentation to each commission and committee so there is understanding about acting as ambassadors for the City, treating customers properly, and understanding the values of the Council and implement them when possible.

It was the consensus of the Council to appoint and reappoint committee/commission members for two terms. If the person desires a third term, that person must re-apply. This will become effective in 2015. The Council will accept recommendations from committees and commissions. Interviews with the Council will be optional. Mr. Schwerm suggested continuing the process of accepting recommendations from committees and commissions. This process has worked well. He requested that any corrections or language changes the Council may have to the handbook be sent to staff.

Mayor Martin stated that the Planning Commission needs to be notified about the change regarding an email to the Council from a member interested in serving as Chair.

## **OTHER ISSUES**

### **Comcast**

Mr. Schwerm noted that the Council will not meet early before the regular meeting on September 15, 2014. A meeting in the upcoming week is scheduled with Comcast. The Attorney assisting the City with these negotiations has drafted an agreement that would allow the City an extension recognizing that the City is now negotiating for the franchise agreement on its own. Staff is researching what equipment the City will need for playback of Council meetings and webstreaming.

### **Lexington Pedestrian to New Playground/Park**

Councilmember Wickstrom expressed her concern about pedestrians crossing Lexington Avenue to get to the new playground at Turtle Lake School. She requested further discussion on what options might be available and working for legislation to reduce the speed. Mr. Schwerm stated that the only option would be a controlled intersection at Royal Oaks Drive.

Councilmember Wickstrom noted that the existing blinking light at the crossing is only in use during school hours. Mr. Schwerm stated that law enforcement deputies have indicated that enforcement is only when there are school patrols for children coming to school or leaving school.

Mr. Schwerm stated that he will discuss this issue further with Public Works Director Maloney to see what can be done to slow traffic at that crossing area to give drivers more time to react to children present.

**50th Celebration**

Mayor Martin announced that the Oak Hill Montessori is celebrating its 50th anniversary on September 21, 2014 and asked if other Councilmembers could attend, as she is not able to go.

The meeting adjourned.